

FACT SHEET

Cryptosporidium and Drinking Water from Private Wells

What is cryptosporidiosis?

Cryptosporidiosis (KRIP-toe-spo-rid-ee-OH-sis) is a diarrheal disease. It is caused by parasites of the *Cryptosporidium* species (spp.). Both the disease and the parasite are commonly known as "crypto." Crypto can live in the intestine of humans and animals, and is passed in the stools. The parasite is protected by an outer shell, which allows it to live outside the body for long periods of time. It also makes it hard to be killed by chlorine disinfection. During the past two decades, crypto has become one of the most common causes of waterborne disease in humans in the United States.

How do I become infected with crypto?

Crypto may be found in soil, food, water, or surfaces that have been contaminated with feces from infected humans or animals. You can become infected after accidentally swallowing the parasite. Crypto is not spread by contact with blood.

Where and how does crypto get into drinking water?

Crypto is found in every part of the United States and throughout the world. Millions of crypto can be released in a bowel movement from an infected human or animal. Crypto may be found in water sources such as private wells that have been contaminated with feces from infected humans or animals. Water can be contaminated through sewage overflows, polluted storm water runoff, agricultural runoff, etc.

What are the symptoms of crypto?

The most common symptoms of crypto include:

- Watery diarrhea
- Dehydration and weight loss
- Stomach cramps
- Upset stomach
- Slight fever

These symptoms generally begin 2-10 days after infection and last about 1-2 weeks in healthy individuals. Some people have no symptoms. However, people with weakened immune systems (e.g., person with HIV/AIDS, cancer patients, and transplant patients) or the elderly may experience a more serious infection that can lead to severe, if not life-threatening, illness. The symptoms may go in cycles in which you may seem to get better for a few days, then feel worse again, before the illness ends.

What should I do if I think I have crypto?

See your health care provider to discuss your concerns.

How is a crypto infection diagnosed?

Laboratory tests can help identify crypto as the cause of illness. These tests identify the parasite in the stools of an infected person. The tests are usually not performed unless the laboratory is instructed specifically to look for the organism. Because testing for crypto can be difficult, you may be asked to submit several stool samples over several days.

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What is the treatment for crypto?

There is no effective treatment for crypto. Most people with a healthy immune system will recover on their own. If you have diarrhea, drink plenty of fluids to prevent dehydration. Rapid loss of fluids from diarrhea can be life-threatening in babies. Parents should talk to their health care provider about fluid replacement therapy options for babies. Anti-diarrheal medicine may help slow down diarrhea, but consult with your health care provider before taking it.

People who are in poor health or who have a weakened immune system are at higher risk for more severe and more prolonged illness. For persons with AIDS, anti-retroviral therapy that improves immune status will also decrease or eliminate symptoms of crypto. However, crypto is usually not cured and may come back if the immune status worsens. See your health care provider to discuss anti-retroviral therapy used to improve immune status.

How do I remove crypto from my drinking water?

Fully boiling your water for 1 minute (3 minutes if you live in a high altitude) will kill or inactivate crypto. Water should then be stored in a clean container with a lid and refrigerated.

An alternative to boiling water is using a point-of-use filter. Not all home water filters remove crypto. Filters that are designed to remove crypto should have one of the following labels:

- Reverse osmosis,
- Absolute pore size of 1 micron or smaller,
- Tested and certified by NSF Standard 53 for cyst removal, or
- Tested and certified by NSF Standard 53 for cyst reduction.

If you want to know more about these filters, please contact NSF International, an organization for public health and safety through standards development, product certification, education, and risk-management.

NSF International 3475 Plymouth Road P.O. Box 130140

Ann Arbor, Michigan 48113-0140 Phone number: (877) 867-3435 Web site: http://www.nsf.org

You may also disinfect your well. It is important to note that crypto is extremely resistant to chlorination, making chlorination an ineffective intervention. Contact your local health department for recommended procedures. Remember to have your well water tested regularly after disinfection to make sure the problem does not recur.

For more information, visit www.cdc.gov/ncidod/healthywater

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